

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER 1454.1101
<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371</b>		
INTERNATIONAL APPLICATION NO. PCT/DE00/00955	INTERNATIONAL FILING DATE March 29, 2000	PRIORITY DATE CLAIMED March 30, 1999
TITLE OF INVENTION MECHANICAL LINK BETWEEN SIDE WALLS AND THE REAR WALL OF A SHEET CASING (As Amended)		
APPLICANT(S) FOR DO/EO/US Heinz-Jürgen NIGGL		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<ol style="list-style-type: none"> <li><input checked="" type="checkbox"/> This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.</li> <li><input checked="" type="checkbox"/> This is an express request to immediately begin national examination procedures (35 U.S.C. 371(f)).</li> <li><input checked="" type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (PCT Article 31).</li> <li><input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))             <ol style="list-style-type: none"> <li>a. <input checked="" type="checkbox"/> is transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> has been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li><input checked="" type="checkbox"/> A translation of the International Application into English (35 U.S.C. 371(c)(2)).</li> <li><input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))             <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> are transmitted herewith (required only if not transmitted by the International Bureau).</li> <li>b. <input type="checkbox"/> have been transmitted by the International Bureau.</li> <li>c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</li> </ol> </li> <li><input type="checkbox"/> A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</li> <li><input type="checkbox"/> An oath or declaration of the inventor (35 U.S.C. 371(c)(4)).</li> <li><input type="checkbox"/> A translation of the Annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</li> </ol>		
Items 10-15 below concern document(s) or information included:		
<ol style="list-style-type: none"> <li>10. <input type="checkbox"/> An Information Disclosure Statement Under 37 CFR 1.97 and 1.98.</li> <li>11. <input type="checkbox"/> An assignment document for recording.             <p>Please mail the recorded assignment document to:</p> <ol style="list-style-type: none"> <li>a. <input type="checkbox"/> the person whose signature, name &amp; address appears at the bottom of this document.</li> <li>b. <input type="checkbox"/> the following:</li> </ol> </li> <li>12. <input checked="" type="checkbox"/> A preliminary amendment.</li> <li>13. <input checked="" type="checkbox"/> A substitute specification</li> <li>14. <input type="checkbox"/> A change of power of attorney and/or address letter.</li> <li>15. <input checked="" type="checkbox"/> Other items or information: <u>International Search Report, International Preliminary Examination Report, and the first page of the published International Application. An Information Disclosure Statement will be filed later.</u></li> </ol>		

09/937771

JC05 Rec'd PCT/PTO

01 OCT 2001

 The U.S. National Fee (35 U.S.C. 371(c)(1)) and other fees as follows:

CLAIMS	(1) FOR	(2) NUMBER FILED	(3) NUMBER EXTRA	(4) RATE	(5) CALCULATIONS
	TOTAL CLAIMS	4 -20=	0	x \$ 18.00	0.00
	INDEPENDENT CLAIMS	2 -3=	0	x \$ 84.00	0.00
	MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+\$280.00	0.00
	BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(4):				
	<input type="checkbox"/> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO .....\$1,040				890.00
	<input checked="" type="checkbox"/> International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO.....\$ 890				
	<input type="checkbox"/> International preliminary examination fee (37 C.F.R. 1.482) not paid to USPTO but international search fee (37 C.F.R. 1.445(a)(2) paid to USPTO...\$ 740				
	<input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provision of PCT Article 33(1)-(4).....\$ 710				
	<input type="checkbox"/> International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(2) to (4) .....\$ 100				
	Surcharge of \$130 for furnishing the National fee or oath or declaration later than <input type="checkbox"/> 20 <input checked="" type="checkbox"/> 30 mos. from the earliest claimed priority date (37 CFR 1.482(e)).				130.00
		TOTAL OF ABOVE CALCULATIONS		1,020.00	
	Reduction by 1/2 for filing by small entity, if applicable. Affidavit must be filed also. (Note 37 CFR 1.9, 1.27, 1.28.)				
		SUBTOTAL		1,020.00	
	Processing fee of \$130 for furnishing the English Translation later than [ ] 20 [ ] 30 mos. from the earliest claimed priority date (37 CFR 1.482(f)).				
		TOTAL NATIONAL FEE		1,020.00	
	Fee for recording the enclosed assignment (37 CFR 1.21(h)).			+	
		TOTAL FEES ENCLOSED		1,020.00	
or	a. <input checked="" type="checkbox"/> A check in the amount of \$1,020.00 to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. 19-3935 in the Amount of \$ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, credit any overpayment to Deposit Account No. 19-3935. A duplicate copy of this sheet is enclosed.				



21171

PATENT TRADEMARK OFFICE

SUBMITTED BY: STAAS &amp; HALSEY LLP

Type Name	Mark J. Henry	Reg. No.	36,162
Signature		Date	Oct. 1, 2001

09/93771

JC05 Rec'd PCT/PTO 01 OCT 2001  
Docket No.: 1454.1101

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re the Application of:

Heinz-Jürgen NIGGL

Serial No. NEW

Group Art Unit: To be assigned

Confirmation No.

Filed:

Examiner: To be assigned

For: MECHANICAL LINK BETWEEN SIDE WALLS AND THE REAR WALL OF A SHEET  
CASING (As Amended)

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Before examination of the above-identified application, please amend the application as follows:

**IN THE TITLE**

Please AMEND the title as follows:

MECHANICAL LINK BETWEEN SIDE WALLS AND THE REAR WALL OF A SHEET  
CASING

**IN THE ABSTRACT:**

Please REPLACE the Abstract originally filed with the enclosed Substitute Abstract attached hereto.

**IN THE SPECIFICATION:**

Please REPLACE the specification originally filed with the enclosed Substitute Specification.

**IN THE CLAIMS:**

Please REPLACE claims 1-3 and ADD new claim 4 in accordance with the following:

1. (ONCE AMENDED) A mechanical connection comprising:

a sheet metal casing having a base part, a pair of side walls and a rear wall all formed from a single sheet-metal part ;

a cutout formed in each of the side walls in the region of the top rear corner;

an angled section formed on the rear wall; and

hook-like extensions provided at sides of the angled section, which hook-like extensions snap into the cutouts of the side walls when the rear wall is swung into position.

2. (ONCE AMENDED) The mechanical connection as claimed in claim 1, wherein the hook-like extensions are sloped such that the width increases from a front to a back of the hook-like extensions.

3. (ONCE AMENDED) The mechanical connection as claimed in claim 1, wherein the hook-like extensions are formed integrally with the angled section.

4. (NEW) A casing comprising:

a base, a pair of side walls and a rear wall all formed from a single sheet of material, such that when assembled each side wall is adjacent to one side of the rear wall;

a cutout formed in each of the side walls in the region of the where the side wall adjoins the rear wall; and

a pair of hook-like extensions extending from the rear wall at positions corresponding to the cutouts such that when assembled, each hook-like extension snaps into a cutout.

**REMARKS**

This Preliminary Amendment is submitted to improve the form of the specification as originally-filed. A substitute specification and marked-up copy of the original specification are enclosed. No new matter is added to these documents.

It is respectfully requested that this Preliminary Amendment be entered in the above-referenced application.

If any further fees are required in connection with the filing of this Preliminary Amendment, please charge same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: Oct. 1, 2001

By: Mark J. Henry  
Mark J. Henry  
Registration No. 36,162

700 Eleventh Street, NW, Suite 500  
Washington, D.C. 20001  
(202) 434-1500

**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**IN THE CLAIMS:**

Please AMEND the following claims:

1. (ONCE AMENDED) A mechanical connection [between side walls and the rear wall of a sheet-metal casing, characterized in that the]comprising:

a sheet metal casing having a base part, a pair of side walls and a rear wall [of the sheet-metal casing comprise]all formed from a single sheet-metal part[,]; [in that the side walls have]

a cutout formed in each of the side walls in the region of the top rear corner[,]; [and in that the rear wall has]

an angled section formed on the rear wall; and

[which, on its sides, has]hook-like extensions provided at sides of the angled section, which hook-like extensions snap into the cutouts of the side walls when the [actual] rear wall is swung into position.

2. (ONCE AMENDED) The mechanical connection as claimed in claim 1, [characterized in that]wherein the hook-like extensions [have outwardly running slopes in their front regions]are sloped such that the width increases from a front to a back of the hook-like extensions.

3. (ONCE AMENDED) The mechanical connection as claimed in claim 1, [characterized in that]wherein the hook-like extensions are formed integrally with the angled section.

Please ADD the following claim.

4. (NEW) A casing comprising:

a base, a pair of side walls and a rear wall all formed from a single sheet of material, such that when assembled each side wall is adjacent to one side of the rear wall;

a cutout formed in each of the side walls in the region of the where the side wall adjoins the rear wall; and

a pair of hook-like extensions extending from the rear wall at positions corresponding to the cutouts such that when assembled, each hook-like extension snaps into a cutout.

## SUBSTITUTE ABSTRACT

In order to produce mechanical connections without additional measures being required, the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part. The side walls have a cutout in the region of the top rear corner, and the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is swung into position.

## Description

Mechanical connection between side walls and the rear wall of a sheet-metal casing

5

The present invention relates to a mechanical connection between the side walls and the rear wall of a sheet-metal casing.

- 10 The mechanical connection between the side walls of a sheet-metal casing and the rear wall usually takes place by means of additional measures, e.g. welding, riveting, screwing, adhesive bonding, etc. and/or by means of additional manipulating operations, such as,  
15 for example, bending lugs, etc.

20 The object of the present invention is to specify a mechanical connection of the type mentioned in the introduction which can be produced without additional measures being required.

25 This object is achieved for a mechanical connection of the type mentioned above in that the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part, in that the side walls have a cutout in the region of the top rear corner, and in that the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is  
30 swung into position.

In the case of the mechanical connection according to the invention, the blank of the sheet-metal part, which forms, inter alia, the side walls and the rear wall, is  
35 configured such that, during the bending operation immediately after the rear wall has been swung into position, said rear wall is forced to snap into the

side walls, and mechanical connection between the side walls and the rear wall is thus produced. The additional measures mentioned above are thus dispensed with.

Further advantageous configurations of the mechanical connection according to the invention can be gathered from the subclaims and from the following description of an exemplary embodiment of the mechanical connection  
5 according to the invention with reference to the drawing, in which:

- Figure 1 shows the completed mechanical connection,  
10 Figure 2 shows a view of part of a side wall and of the rear wall just before the rear wall snaps into the side walls, and

Figures 3 to 5 show different states during the  
15 operation of the rear wall snapping into the side walls.

Figure 1 shows a casing part with a mechanical connection according to the present invention, the casing part comprising the base part 1, the side walls  
20 2 and the rear wall 3.

Figure 2 shows the specifics of the details. The side walls 2 have a cutout 4 in the top rear corner. The actual rear wall 3 has an angled section 5, which is  
25 produced before the rear wall 3 is actually swung into position. It is conceivable here for it to be possible for the angled section 5 to be produced at the same time as the side walls 2 are swung into position.

30 The angled sections 5 of the rear wall 3 have hook-like extensions 6 on each of their sides. These hook-like extensions 6 are preferably likewise parts of the single sheet-metal part and each have an outwardly running slope 7 in their front region. When the rear wall 3 is  
35 swung into position, said slope slides against the side walls 2, which have already been swung into position, and pushes them apart from one another until the hook-like extensions 6 can pass into the cutouts 4.

This operation is illustrated in figures 3 to 5. Once the hook-like extensions 6 have passed into the cutouts 4, the rear wall springs back, with the result that the side walls 2 and the rear wall 3 are hooked 5 together.

## Patent Claims

1. A mechanical connection between side walls and the rear wall of a sheet-metal casing, characterized in that the base part, side walls and rear wall of the sheet-metal casing comprise a single sheet-metal part, in that the side walls have a cutout in the region of the top rear corner, and in that the rear wall has an angled section which, on its sides, has hook-like extensions which snap into the cutouts of the side walls when the actual rear wall is swung into position.  
5
2. The mechanical connection as claimed in claim 1, characterized in that the hook-like extensions have outwardly running slopes in their front regions.  
15
3. The mechanical connection as claimed in claim 1, characterized in that the hook-like extensions are formed integrally with the angled section.  
20

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FIG 1

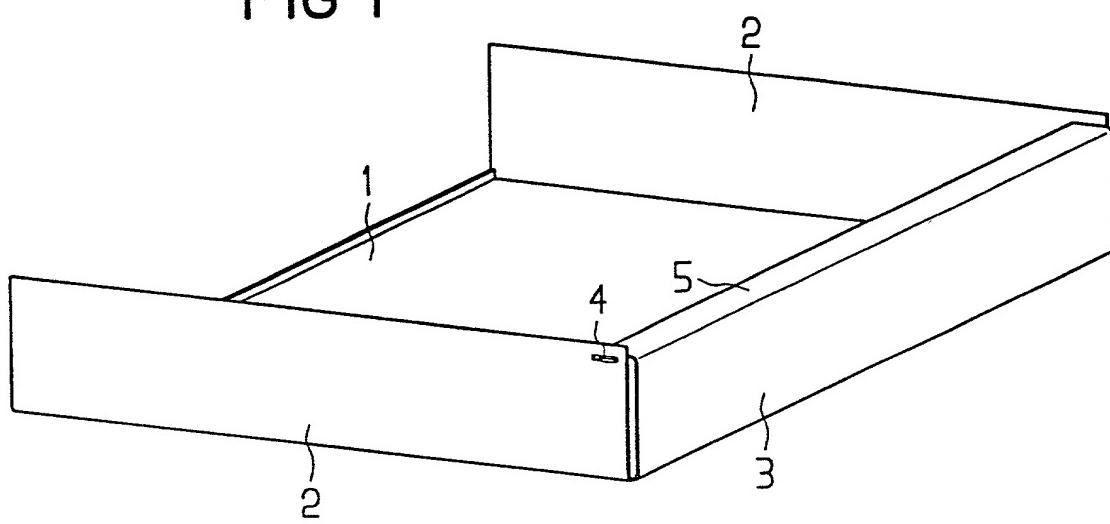
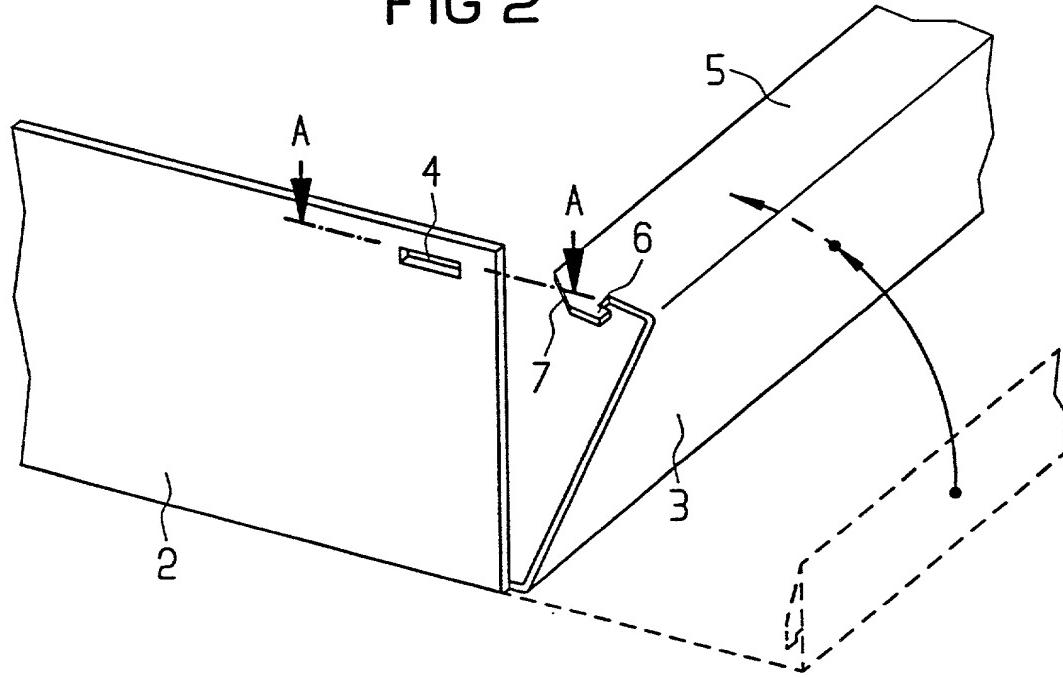


FIG 2



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FIG 3

A-A

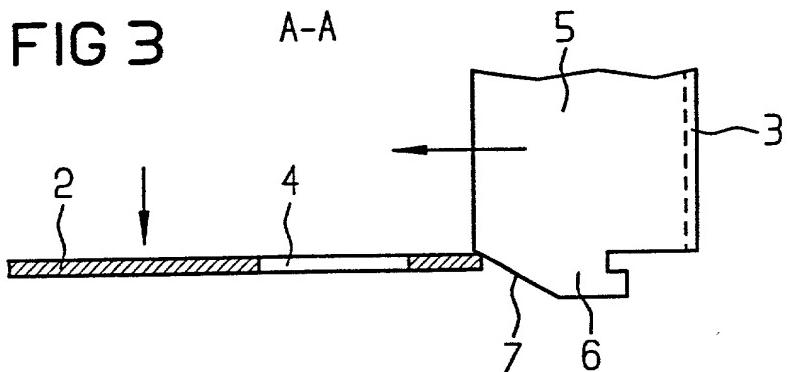


FIG 4

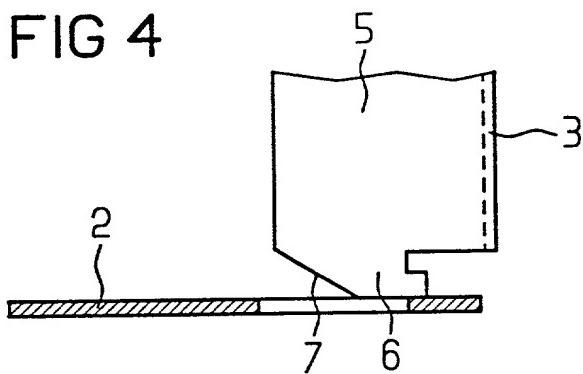
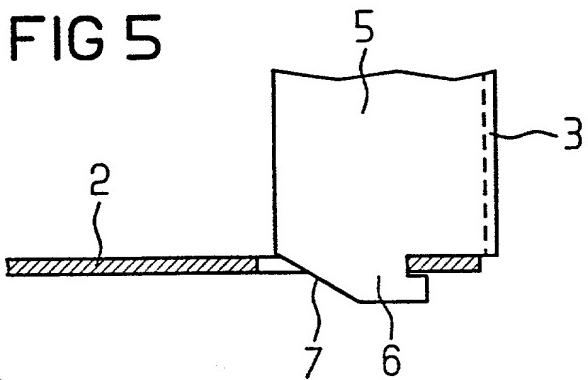


FIG 5



**Declaration and Power of Attorney For Patent Application**  
**Erklärung Für Patentanmeldungen Mit Vollmacht**  
 German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit  
an Eides Statt:

dass mein Wohnsitz, meine Postanschrift, und meine  
Staatsangehörigkeit den im Nachstehenden nach  
meinem Namen aufgeführten Angaben entsprechen,

dass ich, nach bestem Wissen der ursprüngliche, erste  
und alleinige Erfinder (falls nachstehend nur ein Name  
angegeben ist) oder ein ursprünglicher, erster und  
Mitarbeiter (falls nachstehend mehrere Namen  
aufgeführt sind) des Gegenstandes bin, für den dieser  
Antrag gestellt wird und für den ein Patent beantragt  
wird für die Erfindung mit dem Titel:

Mechanische Verbindung zwischen  
Seitenwänden und Rückwand eines  
Blechgehäuses

deren Beschreibung

(zutreffendes ankreuzen)

hier beigefügt ist.

am 29.03.2000 als

PCT Internationale Anmeldung

PCT Anmeldungsnummer PCT/DE00/00955

eingereicht wurde und am \_\_\_\_\_

abgeändert wurde (falls tatsächlich abgeändert).

Ich bestätige hiermit, dass ich den Inhalt der obigen  
Patentanmeldung einschließlich der Ansprüche  
durchgesehen und verstanden habe, die eventuell  
durch einen Zusatzantrag wie oben erwähnt abgeän-  
dert wurde.

Ich erkenne meine Pflicht zur Offenbarung irgendwel-  
cher Informationen, die für die Prüfung der vorlegen-  
den Anmeldung in Einklang mit Absatz 37, Bundes-  
gesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind,  
an.

Ich beanspruche hiermit ausländische Prioritätsvorteile  
gemäß Abschnitt 35 der Zivilprozeßordnung der  
Vereinigten Staaten, Paragraph 119 aller unten ange-  
gebenen Auslandsanmeldungen für ein Patent oder  
eine Erfindersurkunde, und habe auch alle Auslands-  
anmeldungen für ein Patent oder eine Erfindersurkunde  
nachstehend gekennzeichnet, die ein Anmelde-  
datum haben, das vor dem Anmeldedatum der  
Anmeldung liegt, für die Priorität beansprucht wird.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are  
as stated below next to my name,

I believe I am the original, first and sole inventor (if only  
one name is listed below) or an original, first and joint  
Inventor (if plural names are listed below) of the  
subject matter which is claimed and for which a patent  
is sought on the invention entitled

Mechanical link between the side walls  
and rear wall of a sheet casing

the specification of which

(check one)

is attached hereto.

was filed on 29.03.2000 as

PCT international application

PCT Application No. PCT/DE00/00955

and was amended on \_\_\_\_\_

(if applicable)

I hereby state that I have reviewed and understand the  
contents of the above identified specification, including  
the claims as amended by any amendment referred to  
above.

I acknowledge the duty to disclose information which is  
material to the examination of this application in  
accordance with Title 37, Code of Federal Regulations,  
§1.56(a).

I hereby claim foreign priority benefits under Title 35,  
United States Code, §119 of any foreign application(s)  
for patent or inventor's certificate listed below and have  
also identified below any foreign application for patent  
or inventor's certificate having a filing date before that  
of the application on which priority is claimed:

# German Language Declaration

Prior foreign applications  
Priorität beansprucht

Priority Claimed

<u>29905811.5</u> (Number) (Nummer)	<u>DE</u> (Country) (Land)	<u>30.03.1999</u> (Day Month Year Filed) (Tag Monat Jahr eingereicht)	<input checked="" type="checkbox"/> Yes Ja	<input type="checkbox"/> No Nein
 (Number) (Nummer)	 (Country) (Land)	 (Day Month Year Filed) (Tag Monat Jahr eingereicht)	 <input type="checkbox"/> Yes Ja	 <input type="checkbox"/> No Nein
 (Number) (Nummer)	 (Country) (Land)	 (Day Month Year Filed) (Tag Monat Jahr eingereicht)	 <input type="checkbox"/> Yes Ja	 <input type="checkbox"/> No Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivilprozeßordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmeldungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozeßordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.58(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 27, Code of Federal Regulations, §1.56(a) which occurred between the filing date of the prior application and the national or PCT International filing date of this application.

<u>PCT/DE00/00855</u> (Application Serial No.) (Anmeldeseriennummer)	<u>29.03.2000</u> (Filing Date D, M, Y) (Anmeldedatum T, M, J)	<u>anhängig</u> (Status) (patentiert, anhängig, aufgegeben)	<u>pending</u> (Status) (patented, pending, abandoned)
 (Application Serial No.) (Anmeldeseriennummer)	 (Filing Date D,M,Y) (Anmeldedatum T, M, J)	 (Status) (patentiert, anhängig, aufgegeben)	 (Status) (patented, pending, abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegenden Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklärung in Kenntnis dessen abgebe, dass wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozeßordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden können, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gültigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### German Language Declaration

**VERTRETUNGSVOLLMACHT.** Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anführen)

**POWER OF ATTORNEY:** As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)

Customer No. 21171

And I hereby appoint

Telefongespräche bitte richten an:  
(Name und Telefonnummer)

Direct Telephone Calls to: (name and telephone number)

Ext. \_\_\_\_\_

Postanschrift:

Send Correspondence to:

**Staas & Halsey LLP**  
**700 Eleventh Street NW, Suite 500 20001 Washington, DC**  
**Telephone: (001) 202 434 1500 and Facsimile (001) 202 434 1501**  
 or  
**Customer No. 21171**

Voller Name des einzigen oder ursprünglichen Erfinders:	Full name of sole or first inventor:
HEINZ-JUERGEN NIGGL	HEINZ-JUERGEN NIGGL
Unterschrift des Erfinders	Inventor's signature
<i>Heinz J. Niggl 27.9.01</i>	<i>Heinz J. Niggl 27.9.01</i>
Datum	Date
Wohnsitz	Residence
Pöcking, DEUTSCHLAND	Pöcking, GERMANY
Staatsangehörigkeit	Citizenship
DE	DE
Postanschrift	Post Office Address
Lindenberg 149	Lindenberg 149
82343 Pöcking	82343 Pöcking
Voller Name des zweiten Miterfinders (falls zutreffend):	Full name of second joint inventor, if any:
Unterschrift des Erfinders	Second Inventor's signature
Datum	Date
Wohnsitz	Residence
,	,
Staatsangehörigkeit	Citizenship
Postanschrift	Post Office Address

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).

(Supply similar information and signature for third and subsequent joint inventors).